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VOLUME 8

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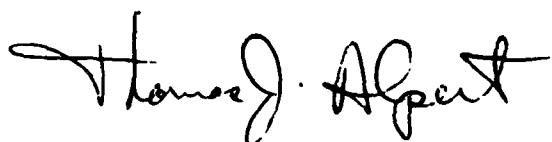
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FOR THE COMMANDER



Thomas J. Alpert, Maj., USAF
Chief, ESD Lincoln Laboratory Project Office

FOREWORD

Volume 8 of Unclassified Publications of Lincoln Laboratory lists reports published from 15 December 1979 to 15 December 1981, as well as updated information on earlier publications.

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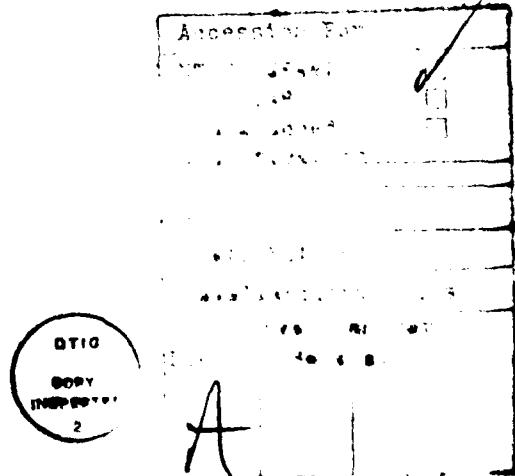


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31 December 1980	Not deposited

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**GaAs SHALLOW-HOMOJUNCTION SOLAR CELLS
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	DTIC No.		DTIC No.
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539	Electro-Optical Tests of CCD Imagers at the GEODSS ETS	D.F. Kostishack C.H. Gylfph, Jr. M.J. MacDonald N.G.S. Pong	20 Feb. 1980 AD-A088270/4
541	Speech Transformation System (Spectrum and/or Excitation) Without Pitch Extraction	S. Seneff	31 July 1980 AD-A097091/3
542	TACS Central Control Facility	S.B. Storch L.E. Taylor S.N. Landon C.D. Cappello	12 Feb. 1981 AD-A102928/9
543	Precision Standoff Guidance Antenna Accuracy Evaluation	F.H. Irons M.M. Landesberg	18 Feb. 1981 AD-A103063/4
544	The Uniqueness of a Multi- dimensional Sequence in Terms of Its Phase or Magnitude	M.H. Hayes	11 Dec. 1980 AD-A095953/6
545	Biased Results with the Leaving-One-Out Method of Pattern Recognition	L.K. Jones K.H. Wickwire	11 Dec. 1980 AD-A096724/0
547	Discrimination Features and Specifications for Optical Decoys	B.J. Burdick	2 Jan. 1981 AD-A098715/6
549	Measurement Correlation for Multiple Sensor Tracking in a Dense Target Environment	C.B. Chang L.C. Youens	20 Jan. 1981 AD-A098001/1
550	Sampled-Data Receiver Design and Performance for BPSK and MSK Spreading Modulations	E.J. Kelly	19 Jan. 1981 AD-A098000/3
551	Optimal Regulation of Struc- tural Systems with Uncertain Parameters	D.C. Hyland	2 Feb. 1981 AD-A099111/7
552	Linear Filtering Models for Terrain Image Segmentation	C.W. Therrien	4 Feb. 1981 AD-A099034/1

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554	A Comparison of the SAOC with the AGK3 Classical Analysis	L.G. Taff S.A. Stansfield	25 Feb. 1981 AD-A100475/3
555	Discrimination and Deployment Requirements for Layered Defense Systems	R.B. Holmes	18 Feb. 1981 AD-A099451/7
556	Frame-Fill Techniques for Reducing Vocoder Data Rates	P.E. Blankenship M.L. Malpass	26 Feb. 1981 AD-A099395/6
557	Resolution of Closely Spaced Optical Targets Using Maximum Likelihood Estimator and Maximum Entropy Method: A Comparison Study	M.J. Tsai	3 Mar. 1981 AD-A100477/9
558	Amorphous-Crystalline Boundary Dynamics in Laser Crystallization	H.J. Zeiger J.C.C. Fan B.J. Palm R.L. Chapman R.P. Gale	25 Aug. 1981 AD-A105811/4
559	A Phase Correction System for Radar Transmitting Tubes	B. Loesch	29 Apr. 1981 AD-A102767/1
560	Automated Phase/Amplitude EHF Measurement System	B.M. Potts	28 May 1981 AD-A103547/6
562	Analysis of Direct Mechanical Stabilization Platform for Antenna Stabilization and Control in a Shipboard Environment	M. Taylor	25 Mar. 1981 AD-A100476/1
566	Finite-Sum Expressions for Signal Detection Probabilities	E.J. Kelly	20 May 1981 AD-A102143/5
567	EHF Test-Bed Subharmonic Mixer	M.J. Aghion	14 July 1981 AD-A106156/3
569	The Minimal Divergence Solution to the Gaussian Masking Problem	P.M. Fishman L.K. Jones C.W. Therrien	22 May 1981 AD-A103062/6

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570	LFP User's Manual (Lincoln FORTRAN Preprocessor) Version 02.01 for MODCOMP Systems	J.H. Cosgrove E.T. Bayliss J.M. Sivak	12 May 1981	AD-A103529/4
574	Statistical Multiplexing of Speech in Hybrid Integrated Networks	T. Bially R. Berger	16 June 1981	AD-A103543/5
576	Practical Aspects of Nonlinear Optimization	R.B. Holmes J.W. Tolleson	19 June 1981	AD-A104858/6
579	Characterization of Power MESFETs at 21 GHz	M.L. Stevens	15 Sept. 1981	AD-A106673/7
580	Radar Propagation at Low Altitudes: A Review and Bibliography	M.L. Meeks	31 July 1981	AD-A103773/8
581	A Comparison of the SAOC with the AGK3 Hemispherical Expansions	L.G. Taff	21 Oct. 1981	AD-A109186/7
584	The Effects of Microphones and Facemasks on LPC Vocoder Performance	E. Singer	25 Sept. 1981	AD-A107908/6
585	Routing in Circuit and Packet Switched Networks: An Annotated Bibliography	R.P. Lippmann	14 Sept. 1981	AD-A106155/5
586	Large-Signal Characterization, Amplifier Design, and Performance of K-Band GaAs MESFETs	C.D. Berglund	11 Dec. 1981	AD-A110873/7
588	Fabrication of Metal Mirrors for Far-Infrared Wavelengths	G.F. Dionne	7 Oct. 1981	AD-A107898/9
589	Accuracy of Parameter Estimates for Closely Spaced Optical Targets Using Multiple Detectors	K-P. Dunn	23 Oct. 1981	AD-A109185/9
594	EHF Propagation Through Foliage	A.J. Simmons	23 Dec. 1981	AD-A110888/5

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1980-1, Vol. 1	ANODE: An Analytic Orbit Determination System	R. Sridharan W.P. Seniw	24 June 1980	AD-A090118/1
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1980-11	Short Space Implementation of Wiener Filtering for Image Restoration	J.S. Lim	5 Mar. 1980	AD-A086769/7
1980-13	Dual-Frequency EHF Ground-Terminal Antenna	M.L. Burrows	3 Mar. 1980	AD-A085607/0
1980-14	Performance of Multiple Satellite Systems With Common Downlink Frequency Hopping Patterns	J. Mosely	29 Feb. 1980	AD-A085590/8
1980-15	A Predictor Model for SHF and EHF MILSATCOM System Availabilities in the Presence of Rain	L.M. Schwab	21 Feb. 1980	AD-A086714/3
1980-17	Plasma X-ray Sources for Lithography	N.P. Economou	12 Mar. 1980	AD-A085656/7

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1980-18	A Velocity Ambiguity Which Depends on Target Rotation Rate	R.C. Raup	7 Mar. 1980
1980-19	Simulation Study on Detection and Estimation of Closely Spaced Optical Targets	M.J. Tsai	18 Mar. 1980
1980-20	CAD: A Code for the Calculation of Atmospheric Density	W.L. Oliver	2 Apr. 1980
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1980-34	Iterative Techniques for Minimum Phase Signal Reconstruction from Phase or Magnitude	T.F. Quatieri A.V. Oppenheim	1 Aug. 1980
1980-37	A New Algorithm for Two-Dimensional Maximum Entropy Power Spectrum Estimation	J.S. Lim N.A. Malik	7 Aug. 1980
1980-39	Design and Development of a Seismic Data Center	M.A. Chinnery A.G. Gann	11 Aug. 1980
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1980-50	A Design Study for an Easily Programmable, High-Speed Processor with a General-Purpose Architecture	D.B. Paul J.A. Feldman V.J. Sferrino	23 Oct. 1980	AD-A094064/3
1980-51	The Digital Signal Processor for the ALCOR Millimeter Wave Radar	R.A. Ford	6 Nov. 1980	AD-A098521/8
1980-54	On Nonparametric Probability Density Estimation Using Orthogonal Series	L.K. Jones	26 Nov. 1980	AD-A094728/3
1980-55	Some General Principles for the Dual Problem to Statistical Classification	L.K. Jones	26 Nov. 1980	AD-A094726/7

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4704	Multiple Access Frequency Hopping Patterns with Low Ambiguity	R.M. Mersereau T.S. Seay	IEEE Trans. Aerospace Electron. Systems <i>AES-17</i> , 571 (1981), DTIC AD-A113319/8
4911	The Use of Angles and Angular Rates. II. Multiple Observation Initial Orbit Determination	L.G. Taff D.L. Hall	Celest. Mech. <i>21</i> , 281 (1980), DTIC AD-A091874/8
4915	Unidimensionally Scanned Phased Arrays	G.N. Tsandoulas	IEEE Trans. Antennas Propag. <i>AP-28</i> , 86 (1980), DTIC AD-A090066/2
4917	Sample Size Considerations for Adaptive Arrays	D.M. Boroson	IEEE Trans. Aerospace Electron. Systems <i>AES-16</i> , 446 (1980), DTIC AD-A091875/5
4922	Receiver Windowing for FDM MFSK Signals	L.S. Metzger D.M. Boroson J.J. Uhran, Jr. I. Kalet	IEEE Trans. Commun. <i>COM-28</i> , 1437 (1980) (correction to original paper published in <i>COM-27</i> , 1519 (1979))
4925	A Technique for Adaptive Voice Flow Control in Integrated Packet Networks	T. Bially B. Gold S. Seneff	IEEE Trans. Commun. <i>COM-28</i> , 325 (1980), DTIC AD-A090067/0
4926	Estimation of the Seismic Moment Tensor From Teleseismic Body Wave Data With Applications to Intraplate and Mantle Earthquakes	T.J. Fitch D.W. McCowan M.W. Shields	J. Geophys. Res. <i>85</i> , 3817 (1980), DTIC AD-A091402/8; "Correction and Addition" in <i>86</i> , 9375 (1981)
4940	Grating Coupling Between Surface Acoustic-Waves and Plate Modes	H.A. Haus A. Lattes J. Melngailis	IEEE Trans. Sonics Ultrason. <i>SU-27</i> , 258 (1980)
4943	Image Restoration by Short Space Spectral Subtraction	J.S. Lim	IEEE Trans. Acoust., Speech, and Signal Processing <i>ASSP-28</i> , 191 (1980), DTIC AD-A091353/3

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4947	Solid Electrolytes Containing Both Mobile and Immobile Alkali Ions	H.Y-P. Hong	J. Power Sources 5, 137 (1980), DTIC AD-A091354/1
4952	VHF and UHF Radar Observations of Equatorial F Region Ionospheric Irregularities and Background Densities	D.M. Towlc	Radio Sci. 15, 71 (1980), DTIC AD-A090910/1
4953	Fourier Transform Phase Coding of Images	S.C. Pohlig	IEEE Trans. Acoust., Speech, and Signal Processing ASSP-28, 339 (1980), DTIC AD-A091355/8
4955	Data Traffic Performance of an Integrated Circuit- and Packet-Switched Multiplex Structure	C.J. Weinstein M.L. Malpass M.J. Fischer	IEEE Trans. Commun. COM-28, 873 (1980), DTIC AD-A091352/5
4961	Ballistic Trajectory Estimation with Angle-Only Measurements	C.B. Chang	IEEE Trans. Automat. Contr. AC-25, 474 (1980), DTIC AD-A097968/2
4972	Liquid-Phase Epitaxy	J.J. Hsieh	Chapter 6 in <i>Handbook on Semiconductors</i> , Vol. 3, edited by S.P. Keller (North-Holland, Amsterdam, 1980), pp. 415-497
4975	Least-Squares Wave Front Errors of Minimum Norm	J. Herrmann	J. Opt. Soc. Am. 70, 28 (1980), DTIC AD-A085787/0
4976	Speech Enhancement Using a Soft-Decision Noise Suppression Filter	R.J. McAulay M.L. Malpass	IEEE Trans. Acoust., Speech, and Signal Processing ASSP-28, 137 (1980), DTIC AD-A097969/0
4977	Suppression of Range Sidelobes in Bistatic Radars	J.J.G. McCue	Proc. IEEE 68, 422 (1980), DTIC AD-A090906/9
4978	Subtraction of Signal Overlaps in Rutherford Backscattering Spectrometry	Z.L. Liau	Appl. Phys. Lett. 36, 51 (1980), DTIC AD-A090904/4
4982	A Study of LPC Analysis of Speech in Additive Noise	J. Tierney	IEEE Trans. Acoust., Speech, and Signal Processing ASSP-28, 389 (1980)

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4983	Nonlinear Coupled-Mode Theory for Surface Acoustic Waves	N.P. Vlannes A. Bers	Accepted J. Appl. Phys. (in press)
4985	Asymptotically Optimal Detector of Memory p for k-Dependent Random Signals	L.K. Jones	IEEE Trans. Inf. Theory <i>IT-26</i> , 491 (1980)
4986	R-Branch Head of the ν_3 Band of CO ₂ at Elevated Temperatures	A.S. Pine G. Guelachvili	J. Mol. Spectrosc. 79, 84 (1980), DTIC AD-A085794/6
4988	Reduction of Quantization Noise in PCM Speech Coding	J.S. Lim A.V. Oppenheim	IEEE Trans. Acoust., Speech, and Signal Processing <i>ASSP-28</i> , 107 (1980), DTIC AD-A090905/1
4990	Bistatic Scattering Reflection Asymmetry, Polarization Reversal Asymmetry, and Polarization Reversal Reflection Symmetry	G.E. Heath	IEEE Trans. Antennas Propag. <i>AP-29</i> , 429 (1981), DTIC AD-A107065/5
4991	Nonlinear Filtering Algorithms for Vector Processing Machines	R.S. Bucy K.D. Senne	Comp. & Maths. with Appl. 6, 317 (1980), DTIC AD-A091098
4992	An Iterative Implementation for 2-D Digital Filters	D.E. Dudgeon	IEEE Trans. Acoust., Speech, and Signal Processing <i>ASSP-28</i> , 666 (1980), DTIC AD-A101001/6
4995	Signal Reconstruction from Phase or Magnitude	M.H. Hayes J.S. Lim A.V. Oppenheim	IEEE Trans. Acoust., Speech, and Signal Processing <i>ASSP-28</i> , 672 (1980), DTIC AD-A101029/7
5000	Replication of 175-Å Lines and Spaces in Polymethylmethacrylate Using X-Ray Lithography	D.C. Flanders	Appl. Phys. Lett. 36, 93 (1980), DTIC AD-A090068/8
5010	The Planck Integral Cannot Be Evaluated in Terms of a Finite Series of Elementary Functions	R. Pavelle	J. Math. Phys. 21, 14 (1980), DTIC AD-A085784/7
5013	Reflection Coefficient Transformations for Phase-Shift Circuits	H.A. Atwater	IEEE Trans. Microwave Theory Tech. <i>MTT-28</i> , 563 (1980), DTIC AD-A097970/8

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5014	Solid-Phase Growth of Large Aligned Grains During Scanned Laser Crystallization of Amorphous Ge Films on Fused Silica	J.C.C. Fan H.J. Zeiger R.P. Gale R.L. Chapman	Appl. Phys. Lett. 36, 158 (1980), DTIC AD-A090909/3
5017	Shallow-Homojunction GaAs Cells with High Resistance to 1-MeV Electron Radiation	J.C.C. Fan R.L. Chapman C.O. Bozler P.J. Drevinsky	Appl. Phys. Lett. 36, 53 (1980), DTIC AD-A090908/5
5019	Doppler-Limited Spectroscopy of the $3\nu_3$ Band of SF ₆	A.S. Pine A.G. Robiette	J. Mol. Spectrosc. 80, 388 (1980), DTIC AD-A097971/6
5021	Voice Communication in Integrated Digital Voice and Data Networks	T. Bialy A.J. McLaughlin C.J. Weinstein	IEEE Trans. Commun. COM-28, 1478 (1980), DTIC AD-A098011/0
5022	Metal-Atom Resonance-Line Lasers	D.J. Ehrlich R.M. Osgood, Jr.	IEEE J. Quantum Electron. QE-16, 257 (1980), DTIC AD-A090907/7
5024	A Local Access Network for Packetized Digital Voice Communication	D.H. Johnson G.C. O'Leary	IEEE Trans. Commun. COM-29, 679 (1981), DTIC AD-A103295/2
5026	Collisional Narrowing of HF Fundamental Band Spectral Lines by Neon and Argon	A.S. Pine	J. Mol. Spectrosc. 82, 435 (1980), DTIC AD-A096792/7
5027	Development of a High-Repetition-Rate Mini-TEA CO ₂ Laser	N. Menyuk P.F. Moulton	Rev. Sci. Instrum. 51, 216 (1980), DTIC AD-A085796/1
5028	Interband Magnetoabsorption of In _{0.53} Ga _{0.47} As	K. Alavi R.L. Aggarwal S.H. Groves	Phys. Rev. B 21, 1311 (1980)
5029	New Applications of Channel Vocoders	B. Gold P.E. Blankenship R.J. McAulay	IEEE Trans. Acoust., Speech, and Signal Processing ASSP-29, 13 (1981), DTIC AD-A103032/9
5031	Adaptive Main-Beam Nulling for Narrow-Beam Antenna Arrays	R.N. Adams L.L. Horowitz K.D. Senne	IEEE Trans. Aerospace Electron. Systems AES-16, 509 (1980), DTIC AD-A101178/2

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5033	The Growth of Large, Laser Quality $Nd_xRE_{1-x}P_5O_{14}$ Crystals	R.D. Plättner W.W. Krihler W.K. Zwickler T. Kovats S.R. Chinn	J. Cryst. Growth 49, 274 (1980), DTIC AD-A090074/6
5037	Metal Mirrors for Far-Infrared Wavelengths	G.F. Dionne	Rev. Sci. Instrum. 52, 308 (1981), DTIC AD-A102973/5
5038	Self-Sustained Pulsations in GaInAsP Diode Lasers	J.N. Walpole T.A. Lind J.J. Hsieh A.G. Foyt	Appl. Phys. Lett. 36, 240 (1980), DTIC AD-A090075/3
5039	On Best Approximation by Truncated Series	H.Z. Ollin	J. Approx. Theory 32, 82 (1981)
5040	The Effect of Implant Temperature on the Electrical Characteristics of Ion Implanted Indium Phosphide	J.P. Donnelly C.E. Hurwitz	Solid-State Electron. 23, 943 (1980), DTIC AD-A096615/0
5043	Pump Depletion and Saturation of Two-Photon Resonant Third-Harmonic Generation Processes	H. Kildal S.R.J. Brueck	IEEE J. Quantum Electron. QE-16, 566 (1980), DTIC AD-A096616/8
5044	Millstone Hill Incoherent Scatter Observations of Auroral Convection Over $60^\circ \leq \Omega \leq 75^\circ$. 2. Initial Results	J.V. Evans J.M. Holt W.L. Oliver R.H. Wand	J. Geophys. Res. 85, 41 (1980)
5045	The Spectral Envelope Estimation Vocoder	D.B. Paul	IEEE Trans. Acoust., Speech, and Signal Processing ASSP-29, 786 (1981), DTIC AD-A107063/0
5047	Convergence Rate of the Extended SMI Algorithm for Narrowband Adaptive Arrays	L.L. Horowitz	IEEE Trans. Aerospace Electron. Systems AES-16, 738 (1980), DTIC AD-A101180/8
5048	Nonvolatile Analog Memory in MNOS Capacitors	R.S. Withers R.W. Ralston E. Stern	IEEE Electron Device Lett. EDL-1, 42 (1980), DTIC AD-A096617/6

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5049	Deconvolution of Infrared Spectra Beyond the Doppler Limit	J. Pliva A.S. Pine P.D. Willson	Appl. Opt. 19, 1833 (1980)
5050	Remote Sensing of CO Using Frequency-Doubled CO ₂ Laser Radiation	D.K. Killinger N. Menyuk W.E. DeFeo	Appl. Phys. Lett. 36, 402 (1980), DTIC AD-A096618/4
5051	The Electrical Characteristics of InP Implanted with the Column IV Elements	J.P. Donnelly G.A. Ferrante	Solid-State Electron. 23, 1151 (1980), DTIC AD-A101179/0
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5125	Relations Between 2-D and Multichannel Linear Prediction	C.W. Therrien	IEEE Trans. Acoust., Speech, and Signal Processing ASSP-29, 454 (1981), DTIC AD-A105406/3
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5158	Coding for the Turbulent Atmospheric Optical Channel	V.W.S. Chan	Accepted IEEE Trans. Commun.
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5162	Aberrations of the Perfect Grating Rhomb	J. Herrmann C.A. Primmerman	Appl. Opt. 20, 3981 (1981), DTIC AD-A113230/7
5163	Efficient Si Solar Cells by Laser Photochemical Doping	T.F. Deutsch J.C.C. Fan G.W. Turner R.L. Chapman D.J. Ehrlich R.M. Osgood, Jr.	Appl. Phys. Lett. 38, 144 (1981), DTIC AD-A101030/5
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5170	Solid-Phase Heteroepitaxy of Ge on $<100>$ Si	B-Y. Tsaur J.C.C. Fan R.P. Gale	Appl. Phys. Lett. 38, 176 (1981), DTIC AD-A103345/5
5171	Transferable Single-Crystal Semiconductor Films	C.O. Bozler	In <i>Physics News in 1980</i> , P.F. Schewe, Ed. (American Institute of Physics, New York, 1980), pp. 39-40
5172	A Theoretical Note on the Structural Features Observed in Pulsed Energy-Beam Crystallization	H.J. Zeiger M.J. Larsen B.J. Palm	Appl. Phys. Commun. 1, 61 (1981), DTIC AD-A110706/9
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5175	Liquid-Encapsulated Czochralski Growth of InP Crystals	G.W. Iseler	J. Cryst. Growth 54, 16 (1981), DTIC AD-A107051/5
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5179	Explosive Crystallization of Amorphous Germanium	H.J. Leamy W.L. Brown G.K. Celler G. Foti G.H. Gilmer J.C.C. Fan	<i>Appl. Phys. Lett.</i> 38 , 137 (1981)
5180	ν_3 Vibrational Ladder of SF ₆	C.W. Patterson B.J. Krohn A.S. Pine	<i>Opt. Lett.</i> 6 , 39 (1981)
5181	Compact Electrooptically Q-Switched CO ₂ Waveguide Laser	S. Marcus	<i>Rev. Sci. Instrum.</i> 52 , 482 (1981), DTIC AD-A103404/0
5182	Effects of Arbitrary Focal Spot Intensity Distribution, Detector Width, and Scanning Eccentricity in X-Ray Computed Tomography	J.G. Verly	<i>IEEE Trans. Acoust., Speech, and Signal Processing ASSP-29</i> , 98 (1981)
5183	Dual Active/Passive Infrared Imaging Systems	R.C. Harney	<i>Opt. Eng.</i> 20 , 976 (1981), DTIC AD-A114523/4
5185	Heteroepitaxy of Vacuum-Evaporated Ge Films on Single-Crystal Si	B-Y. Tsaur M.W. Geis J.C.C. Fan R.P. Gale	<i>Appl. Phys. Lett.</i> 38 , 779 (1981), DTIC AD-A103403/2
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5191	Fundamental Line Broadening of Single-Mode (GaAl)As Diode Lasers	M.W. Fleming A. Mooradian	Appl. Phys. Lett. 38, 511 (1981), DTIC AD-A103037/8
5192	On the Use of AsH ₃ in the Molecular Beam Epitaxial Growth of GaAs	A.R. Calawa	Appl. Phys. Lett. 38, 701 (1981), DTIC AD-A105409/7
5193	Surface-Enhanced Raman Scattering from Microlithographic Silver Particle Surfaces	P.F. Liao J.G. Bergman D.S. Chemla A. Wokaun J. Melngailis A.M. Hawryluk N.P. Economou	Chem. Phys. Lett. 82, 355 (1981)
5194	Laser Beam Profile Shaping with Binary Diffraction Gratings	W.B. Veldkamp	Opt. Commun. 38, 381 (1981), DTIC AD-A110718/4
5195	n ⁺ -InP Growth on InGaAs by Liquid Phase Epitaxy	S.H. Groves M.C. Plonko	Appl. Phys. Lett. 38, 1003 (1981), DTIC AD-A105410/5
5196	Resolution of Closely Spaced Optical Targets Using MLE and MEM	M.J. Tsai	Accepted IEEE Trans. Aerospace Electron. Systems
5197	Circular and Extended Circular Harmonic Transforms and Their Relevance to Image Reconstruction from Line Integrals	J.G. Verly	J. Opt. Soc. Am. 71, 825 (1981), DTIC AD-A107050/7
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5201	Low-Loss GaAs Optical Waveguides Formed by Lateral Epitaxial Growth over Oxide	F.J. Leonberger C.O. Bozler R.W. McClelland I. Melngailis	Appl. Phys. Lett. 38, 313 (1981), DTIC AD-A105371/9
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5204	The Importance of Phase in Signals	A. V. Oppenheim J. S. Lim	Proc. IEEE 69, 529 (1981), DTIC AD-A099919
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5209	Photovoltaic Cells	J. C. C. Fan	Accepted in <i>Kirk-Othmer: Encyclopedia of Chemical Technology</i> , Vol. 17, Third Edition (Wiley, New York)
5213	Biased Results with the Leaving-One-Out Method of Pattern Recognition	L. K. Jones K. H. Wickwire	Accepted IEEE Trans. Inf. Theory
5215	Optical Properties of Proton Bombarded InP and GaInAsP	F. J. Leonberger J. N. Walpole J. P. Donnelly	IEEE J. Quantum Electron. QE-17, 830 (1981), DTIC AD-A105372/7
5217	The Reconstruction of a Multi-dimensional Sequence from the Phase or Magnitude of Its Fourier Transform	M. H. Hayes	Accepted IEEE Trans. Acoust., Speech, and Signal Processing
5218	Efficient Si Solar Cells by Low-Temperature Solid-Phase Epitaxy	B-Y. Tsaur G. W. Turner J. C. C. Fan	Appl. Phys. Lett. 39, 749 (1981)
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5222	Shallow PtSi-Si Schottky Barrier Contacts Formed by a Multilayer Metallization Technique	B-Y. Tsaur D.J. Silversmith R.W. Mountain L.S. Hung S.S. Lau T.T. Sheng	J. Appl. Phys. 52, 5243 (1981), DTIC AD-A110709/3
5224	A Propagation Experiment Combining Reflection and Diffraction	M.L. Meeks	Accepted IEEE Trans. Antennas Propag.
5225	Laser Chemical Technique for Rapid Direct Writing of Surface Relief in Silicon	D.J. Ehrlich R.M. Osgood, Jr. T.F. Deutsch	Appl. Phys. Lett. 38, 1018 (1981), DTIC AD-A105375/0
5226	Adaptive Filtering for Image Enhancement	T. Peli J.S. Lim	Accepted Opt. Eng.
5227	Transient Annealing of Arsenic-Implanted Silicon Using a Graphite Strip Heater	B.-Y. Tsaur J.P. Donnelly J.C.C. Fan M.W. Geis	Appl. Phys. Lett. 39, 93 (1981), DTIC AD-A107230/5
5228	Identification and Spectral Estimation of Noisy Multivariate Autoregressive Processes	T.S. Lee	Proc. IEEE Intl. Conf. on Acoustics, Speech and Signal Processing, Atlanta, Georgia, 30 March - 1 April 1981, Vol. 1, pp. 503-507
5229	Effect of Turbulence-Induced Correlation on Laser Remote Sensing Errors	D.K. Killinger N. Menyuk	Appl. Phys. Lett. 38, 968 (1981), DTIC AD-A105374/3
5230	Temporal Correlation Measurements of Pulsed Dual CO ₂ Lidar Returns	N. Menyuk D.K. Killinger	Opt. Lett. 6, 301 (1981), DTIC AD-A105373/5
5231	A Surface-Acoustic Wave/Metal-Oxide-Silicon Field-Effect Transistor Memory Correlator	D.L. Smythe R.W. Ralston	Appl. Phys. Lett. 38, 886 (1981), DTIC AD-A105369/3

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5234	MOSFET's on Silicon Prepared by Moving Melt Zone Recrystallization of Encapsulated Polycrystalline Silicon on an Insulating Substrate	E.W. Maby M.W. Geis Y.L. LeCoz D.J. Silversmith R.W. Mountain D.A. Antoniadis	IEEE Electron Device Lett. <i>EDL-2</i> , 241 (1981)
5235	Maximum-Entropy Power Spectrum Estimation of Signals with Missing Correlation Points	J.S. Lim N.A. Malik	IEEE Trans. Acoust., Speech, and Signal Processing <i>ASSP-29</i> , 1215 (1981)
5236	Single-Crystal Si Films on SiO_2 Prepared by Using a Stationary Graphite Heater for Lateral Epitaxy by Seeded Solidification	J.C.C. Fan B.-Y. Tsaur M.W. Geis	Appl. Phys. Lett. 39, 308 (1981), DTIC AD-A110720/0
5237	A New Asteroid Observation and Search Technique	L.G. Taff	Publ. Astron. Soc. Pacific 93, 658 (1981), DTIC AD-A114667/9
5238	Reducible Polynomials in More Than One Variable	M.H. Hayes J.H. McClellan	Accepted Proc. IEEE
5239	Technique for Generating Focal-Plane Flattop Laser-Beam Profiles	W. Veldkamp	Accepted Rev. Sci. Instrum.
5240	Improved Techniques for Growth of Large-Area Single-Crystal Si Sheets over SiO_2 Using Lateral Epitaxy by Seeded Solidification	B-Y. Tsaur J.C.C. Fan M.W. Geis D.J. Silversmith R.W. Mountain	Appl. Phys. Lett. 39, 561 (1981), DTIC AD-A110725/9
5242	MNOS/CCD Nonvolatile Analog Memory	R.S. Withers D.J. Silversmith R.W. Mountain	IEEE Electron Device Lett. <i>EDL-2</i> , 165 (1981), DTIC AD-A107229/7
5243	Ultrathin, High-Efficiency Solar Cells Made from GaAs Films Prepared by the CLEFT Process	C.O. Bozler R.W. McClelland J.C.C. Fan	IEEE Electron Device Lett. <i>EDL-2</i> , 203 (1981)
5244	Optical Reflectance Technique for Observations of Submonolayer Adsorbed Films	V. Daneu R.M. Osgood, Jr. D.J. Ehrlich	Opt. Lett. 6, 563 (1981), DTIC AD-A113232/3

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5245	Mixing of 10- μ m Radiation in Room-Temperature Schottky Diodes	P.E. Tannenwald H.R. Fetterman C. Freed C.D. Parker B.J. Clifton R.G. O'Donnell	Opt. Lett. 6, 481 (1981), DTIC AD-A110710/1
5246	Slider LPE of $Hg_{1-x}Cd_xTe$ Using Mercury Pressure Controlled Growth Solutions	T.C. Harman	J. Electron. Mater. 10, 1069 (1981), DTIC AD-A110707/7
5247	Remote Probing of the Atmosphere Using a CO_2 DIAL System	D.K. Killinger N. Menyuk	IEEE J. Quantum Electron. QE-17, 1917 (1981), DTIC AD-A110716/8
5249	Laser Microreaction for Deposition of Doped Silicon Films	D.J. Ehrlich R.M. Osgood, Jr. T.F. Deutsch	Appl. Phys. Lett. 39, 957 (1981), DTIC AD-A113231/5
5250	A Calculation of the Capacitance-Voltage Characteristics of $p^+-InP/n-InP/n-InGaAsP$ Photodiodes	J.P. Donnelly	Accepted Solid-State Electron.
5251	Sputtered Films for Wavelength-Selective Applications	J.C.C. Fan	Thin Solid Films 80, 125 (1981), DTIC AD-A107232/1
5252	Performance Advantage of Complex LMS for Controlling Narrow-Band Adaptive Arrays	L.L. Horowitz K.D. Senne	IEEE Trans. Circuits and Systems CAS-28, 562 (1981), DTIC AD-A107231/3
5253	Direct Writing of Refractory Metal Thin Film Structures by Laser Photodeposition	D.J. Ehrlich R.M. Osgood, Jr. T.F. Deutsch	J. Electrochem. Soc. 128, 2039 (1981), DTIC AD-A110792/9
5255	Optimal Stopping Problems for Differential Equations Perturbed by a Poisson Process	K.H. Wickwire	Naval Research Logistics Quarterly 28, 423 (1981)
5263	Sub-Doppler Submillimeter Spectroscopy Using Molecular Beams	W.A.M. Blumberg D.D. Peck H.R. Fetterman	Appl. Phys. Lett. 39, 857 (1981), DTIC AD-A113233/1

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5264	Cryogenic Operation of Submillimeter Quasioptical Mixers	P.F. Goldsmith H.R. Fetterman B.J. Clifton C.D. Parker N.R. Erickson	Intl. J. Infrared and Millimeter Waves 2, 915 (1981)
5266	Reactive Electrooptic Q Switching of a CO ₂ Laser	S. Marcus	J. Appl. Phys. 52, 6984 (1981), DTIC AD-A110644/2
5268	Implementation of 2-D Digital Filters by Iterative Methods	T.F. Quatieri D.E. Dudgeon	Accepted IEEE Trans. Acoust., Speech, and Signal Processing
5269	The Permeable Base Transistor and Its Application to Logic Circuits	C.O. Bozler G.D. Alley	Accepted Proc. IEEE
5270	Production and Annealing of Ion-Bombardment Damage in Silicides of Pt, Pd, and Ni	B-Y. Tsaur C.H. Anderson, Jr.	Accepted J. Appl. Phys.
5272	Multiple-Order Radial-Grating Shearing Interferometer	P.D. Henshaw S.K. Manlief	Accepted Appl. Opt.
5274	Photodeposition of Metal Films with Ultraviolet Laser Light	D.J. Ehrlich R.M. Osgood, Jr. T.F. Deutsch	Accepted J. Vac. Sci. Technol.
5275	Compact, Collinear, and Variable Anamorphic-Beam Compressor Design	W. Veldkamp E. Van Allen	Accepted Appl. Opt.
5276	n-Channel Deep-Depletion Metal-Oxide-Semiconductor Field-Effect Transistors Fabricated in Zone-Melting-Recrystallized Polycrystalline Si Films on SiO ₂	B-Y. Tsaur M.W. Geis J.C.C. Fan D.J. Silversmith R.W. Mountain	Appl. Phys. Lett. 39, 909 (1981), DTIC AD-A113234/9
5277	Efficient Raman Frequency Conversion in Liquid Nitrogen	S.R.J. Brueck H. Kildal	Accepted IEEE J. Quantum Electron.
5279	Zone-Melting Recrystallization of Encapsulated Silicon Films on SiO ₂ - Morphology and Crystallography	M.W. Geis H.I. Smith B-Y. Tsaur J.C.C. Fan E.W. Maby D.A. Antoniadis	Accepted Appl. Phys. Lett.

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5281	Book review of Kurt Lambeck's "The Earth's Variable Rotation: Geophysical Causes and Consequences"	M.A. Chinnery	Trans. Am. Geophys. Union 62, 605 (1981)
5282	Stress-Enhanced Carrier Mobility in Zone Melting Recrystallized Polycrystalline Si Films on SiO ₂ -Coated Substrates	B-Y. Tsaur J.C.C. Fan M.W. Geis	Accepted Appl. Phys. Lett.
5283	Localized Laser Etching of Compound Semiconductors in Aqueous Solution	R.M. Osgood, Jr. A. Sanchez-Rubio D.J. Ehrlich V. Daneu	Accepted Appl. Phys. Lett.
5286	Beam Profile Shaping for Laser Radars That Use Detector Arrays	W.B. Veldkamp C.J. Kastner	Accepted Appl. Opt.
5287	Monte Carlo Description of Time- and Space-Resolved Multiple Forward Scatter in Natural Water	R.M. Lerner J.D. Summers	Accepted Appl. Opt.
5291	Electrical Properties of Laser Chemically Doped Silicon	T.F. Deutsch D.J. Ehrlich D.D. Rathman D.J. Silversmith R.M. Osgood, Jr.	Appl. Phys. Lett. 39, 825 (1981), DTIC AD-A110715/0
5293	Infrared Laser Developments	A. Mooradian P.F. Moulton	Accepted Laser Focus
5294	Optimal Target Designation Techniques	L.M. Novak	IEEE Trans. Aerospace Electron. Systems AES-17, 676 (1981)
5295	Effects of Subgrain Boundaries on Carrier Transport in Zone-Melting-Recrystallized Si Films on SiO ₂ -Coated Si Substrates	B-Y. Tsaur J.C.C. Fan M.W. Geis D.J. Silversmith R.W. Mountain	Accepted IEEE Electron Device Lett.
5296	Focal Depths and Moment Tensor Representations of Shallow Earthquakes Associated With the Great Sumba Earthquake	T.J. Fitch R.G. North M.W. Shields	J. Geophys. Res. 86, 9357 (1981)

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5299 **Investigation for Single-Event
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**J.P. Woods
D.K. Nichols
W.E. Price**

**IEEE Trans. Nucl. Sci. NS-28,
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4779D	Beam Annealing of Ion-Implanted GaAs and InP	J.C.C. Fan R.L. Chapman J.P. Donnelly G.W. Turner C.O. Bozler	Proc. MRS Annual Mtg. 1980: <i>Laser and Electron-Beam Solid Interactions and Materials Processing</i> (Elsevier North-Holland, New York, 1981), pp. 261-274
4818A	Development and Applications of a High-Speed Electrooptic Analog-to-Digital Converter	F.J. Leonberger	Proc. 3rd Rocky Mountain Symp. on Microcomputers: Systems, Software, Architecture, Pingree Park, Colorado, 19-22 August 1979, pp. 105-117
4867, 4867A	Digital Beam Switch for Agile Beam Laser Radar	P.D. Henshaw A. Sanchez R.B. McSheehy	Appl. Opt. 19, 884 (1980); also in Proc. SPIE Vol. 202: <i>Active Optical Devices</i> (Society of Photo-Optical Instrumentation Engineers, Bellingham, Washington, 1980), pp. 63-70, DTIC AD-A085423/2
4877	A Technique for Measuring the Bandwidth Characteristics of Adaptive Nulling Antennas	J.T. Mayhan	1979 Intl. Symp. Digest, <i>Antennas and Propagation</i> , Volume I, University of Washington, Seattle, 18-22 June 1979, pp. 190-192
4889	A Unifying Derivation of Switching DC-DC Converter Topologies	E.E. Landsman	PESC '79 Record, San Diego, California, 18-22 June 1979, pp. 239-243
4894A	Low-Cost, High-Efficiency GaAs Solar Cells	J.C.C. Fan	Proc. Photovoltaics Advanced R & D Annual Review Meeting, Denver, Colorado, 17-19 September 1979, pp. 317-323
4918	The 100-kWP Photovoltaic Power System at Natural Bridges National Monument	F.J. Solman J.H. Helfrich E.F. Lyon A.E. Benoit	Proc. 15th Intersociety Energy Conversion Engineering Conf., AIAA, Seattle, Washington, 18-22 August 1980, Vol. 1, pp. 511-514

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4919	Residential Photovoltaic Systems	E.C. Kern, Jr.	Proc. 15th Intersociety Energy Conversion Engineering Conf., AIAA, Seattle, Washington, 18-22 August 1980, Vol. 1, pp. 515-518
4960A	Development and Applications of High-Speed InP Optoelectronic Switches	F.J. Leonberger P.F. Moulton	Topical Meeting on Integrated and Guided-Wave Optics, Incline Village, Nevada, 28-30 January 1980, Technical Digest, pp. WCS-1 - WCS-4
4967B	Graphoepitaxy	D.C. Flanders	J. Vac. Sci. Technol. 17, 1195 (1980)
4968	X-Ray Zone Plates Fabricated Using Electron-Beam and X-Ray Lithography	D.C. Shaver D.C. Flanders N.M. Ceglio H.I. Smith	J. Vac. Sci. Technol. 16, 1626 (1979)
4987	The Critical Satellite Technical Issues of Future Pervasive Broadband Low-Cost Communication Networks	R.L. Harvey	Acta Astronaut. 7, 1191 (1980)
5008	Surface-Acoustic-Wave Devices for Spread-Spectrum Communication	J.H. Cafarella	Jpn. J. Appl. Phys. 19, 667 (1980)
5049	Wideband LiNbO_3 Elastic Convolver with Parabolic Horns	R.A. Becker D.H. Hurlburt	1979 Ultrasonics Symposium Proceedings (IEEE, New York, 1979), pp. 729-731, DTIC AD-A090870/7
5051	Flight Performance of the LES-8 9 Three-Axis Attitude Control System	F.W. Floyd C.H. Much N.P. Smith J.R. Vernau J.P. Woods	Proc. AIAA 8th Communications Satellite Systems Conf., Orlando, Florida, 21-24 April 1980, pp. 159-170
5054A	Optical Measurements of Degradation in Aircraft Boundary Layers	D. Kelsall	Proc. Aero-Optics Symp. on Electromagnetic Wave Propagation from Aircraft, Ames Research Center, Moffett Field, California, 14-15 August 1979 (NASA Conference Publication 2121), pp. 415-435

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5058	Effects of Temperature-Dependent Anisotropy in RAC Devices and a Cut of Quartz for a Temperature-Compensated RAC	D.E. Oates R.C. Williamson	<i>1979 Ultrasonics Symposium Proceedings</i> (IEEE, New York 1979), pp. 691-695, DTIC AD-A090871/5
5059	Four-Wave Interactions in Acoustoelectric Integrating Correlators	R.W. Ralston E. Stern	<i>1979 Ultrasonics Symposium Proceedings</i> (IEEE, New York, 1979), pp. 761-766, DTIC AD-A090872/3
5060	A SAW Accumulating Correlator with CCD Readout	R.W. Ralston D.L. Smythe E. Stern	<i>1979 Ultrasonics Symposium Proceedings</i> (IEEE, New York, 1979), pp. 771-775, DTIC AD-A090873/1
5079	Performance and Reliability of Photovoltaic Modules at Various MIT LL Test Sites	S.E. Forman M.P. Themelis	Proc. Fourteenth IEEE Photovoltaic Specialists Conference - 1980, San Diego, California, 7-10 January 1980, pp. 1284-1289
5081	Integrated Surface Acoustic Wave Charge-Coupled Device (SAW CCD) Signal Processing Devices	D.L. Smythe R.W. Ralston	Proc. SPIE Vol. 209: <i>Optical Signal Processing for C³I</i> (Society of Photo-Optical Instrumentation Engineers, Bellingham, Washington, 1980), pp. 152-158, DTIC AD-A090254 4
5087A	Recursive Time and Frequency Domain Representations of the Divergence Between Discrete Stationary Gaussian Processes with an Application to a Masking Problem	P.M. Fishman L.S. Segal	Proc. 1980 Joint Automatic Control Conference, San Francisco, California, 13-15 August 1980, Volume 1, p. WA6-E
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5092	A Real-Time Noise Suppression Filter for Speech Enhancement and Robust Channel Vocoding	R.J. McAulay M.L. Malpass	Proc. IEEE Intl. Conf. on Acoustics, Speech and Signal Processing, Denver, Colorado, 9-11 April 1980, Vol. 1, pp. 699-702, DTIC AD-A091867/2
5093	Radar Target Detection and Map-Matching Algorithm Studies	L.M. Novak	IEEE Trans. Aerospace Electron. Systems <i>AES-16</i> , 620 (1980), DTIC AD-A102716/8
5095	Fabrication of Submicrometer Period Gratings with Precisely Defined Profiles for Integrated Optics Applications	D.C. Flanders A.M. Hawryluk	Topical Meeting on Integrated and Guided-Wave Optics, Incline Village, Nevada, 28-30 January 1980, Technical Digest, pp. WA3-1 - WA3-4
5102	High Power Optical Components and Techniques for an IR Laser Radar	A.C. Parker L.J. Sullivan	Proc. High Power Laser Optical Components Mtg., Naval Weapons Center, China Lake, California, August 1980, Part 1, p. 146
5106	Comparison of Acousto-electric and Acousto-optic Signal Processing Devices	R.A. Becker S.A. Reible R.W. Ralston	Proc. SPIE Vol. 209: <i>Optical Signal Processing for C³I</i> (Society of Photo-Optical Instrumentation Engineers, Bellingham, Washington, 1980), pp. 126-133, DTIC AD-A090219/7
5109	Simulation of the Performance of a 100-kW-Peak Photovoltaic System	B.L. Grossman B.L. Brench L.L. Bucciarelli F.J. Solman	Proc. Fourteenth IEEE Photovoltaic Specialists Conference - 1980, San Diego, California, 7-10 January 1980, pp. 266-272
5110	The Energy Balance Associated with the Use of a Maximum Power Tracer in a 100-kW Peak Power System	L.L. Bucciarelli E.F. Lyon N.E. Rasmussen	Proc. Fourteenth IEEE Photovoltaic Specialists Conference - 1980, San Diego, California, 7-10 January 1980, pp. 523-527

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5111	A Comparison of Theory and Experiment for Photovoltaic/Thermal Collector Performance	S.D. Hendrie P. Raghuraman	Proc. Fourteenth IEEE Photovoltaic Specialists Conference - 1980, San Diego, California, 7-10 January 1980, pp. 1277-1283
5112	A Photovoltaic Powered 20-hp DC/AC Irrigation System and a 3-kW Nitrogen Generator	R.F. Hopkinson	Proc. Fourteenth IEEE Photovoltaic Specialists Conference - 1980, San Diego, California, 7-10 January 1980, pp. 115-120
5113	Performance of a Photovoltaically Powered Air-Conditioning System	E.C. Kern, Jr. A.R. Millner	Proc. Fourteenth IEEE Photovoltaic Specialists Conference - 1980, San Diego, California, 7-10 January 1980, pp. 97-102
5114	System Design, Test Results, and Economic Analysis of a Flywheel Energy Storage and Conversion System for Photovoltaic Applications	A.R. Millner T. Dinwoodie	Proc. Fourteenth IEEE Photovoltaic Specialists Conference - 1980, San Diego, California, 7-10 January 1980, pp. 1018-1024
5115A	Microprocessor-Based Control of the Photovoltaic Solar Power System for an AM Radio Station	C.H. Much P.J. Rothenheber	IEEE 1980 IECI Proceedings, Philadelphia, Pennsylvania, 17-20 March 1980, pp. 210-216
5118	Residential System Designs for the Northeast and Southwest	M.C. Russell	Proc. Fourteenth IEEE Photovoltaic Specialists Conference - 1980, San Diego, California, 7-10 January 1980, pp. 1117-1120
5124	Proposed Design of a-Si:H Solar Cells Using Ultrathin Active Layer to Increase Conversion Efficiency	J.C.C. Fan C.O. Bozler	Proc. Fourteenth IEEE Photovoltaic Specialists Conference - 1980, San Diego, California, 7-10 January 1980, pp. 1070-1073, DTIC AD-A090299/9
5126A	Reduction of Quantization Noise in Pulse Code Modulation Image Coding	J.S. Lim	Opt. Eng. 19, 577 (1980)

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5127	GaAs Shallow-Homojunction Solar Cells	J.C.C. Fan G.W. Turner R.P. Gale C.O. Bozler	Proc. Fourteenth IEEE Photovoltaic Specialists Conference - 1980, San Diego, California, 7-10 January 1980, pp. 1102-1105, DTIC AD-A090668/5
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5128	Indium Phosphide Homojunction Solar Cells	G.W. Turner J.C.C. Fan J.J. Hsieh	Proc. Fourteenth IEEE Photovoltaic Specialists Conference - 1980, San Diego, California, 7-10 January 1980, pp. 351-353, DTIC AD-A090293/2
5129	Efficient Large-Grained GaAs Homojunction Solar Cells	G.W. Turner J.C.C. Fan R.P. Gale O. Hurtado	Proc. Fourteenth IEEE Photovoltaic Specialists Conference - 1980, San Diego, California, 7-10 January 1980, pp. 1330-1332, DTIC AD-A090294/0
5130	A New Technique for Producing Large-Grained Semiconductor Sheets by Laser Crystallization of Amorphous Films	J.C.C. Fan H.J. Zeiger R.P. Gale R.L. Chapman	Proc. Fourteenth IEEE Photovoltaic Specialists Conference - 1980, San Diego, California, 7-10 January 1980, pp. 218-223, DTIC AD-A090300/5
5132	Progress in the Fabrication of Artificial Microstructures for X-Ray Imaging and Spectroscopy	D.C. Flanders D.C. Shaver A.M. Hawryluk H.I. Smith	Annals of the New York Academy of Sciences, Volume 342, June 13, 1980, pp. 203-212

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5136	Development of a Multistatic Measurement System	J.E. Salah J.E. Morriello	The Record of the IEEE 1980 International Radar Conference, Arlington, Virginia, 28-30 April 1980, pp. 88-93, DTIC AD-A090298/1
5154	Fabrication of Ohmic Contacts on p-Type InP Using Ion Implantation and Laser Annealing	Z.L. Liau N.L. DeMeo J.P. Donnelly D.E. Mull R. Bradbury J.P. Lorenzo	In <i>Laser and Electron Beam Processing of Materials</i> , C.W. White and P.S. Peercy, Eds. (Academic Press, New York, 1980), p. 494
5157	Solid-Phase Crystallization Produced by Laser Scanning of Amorphous Ge Films: The Role of Latent Heat in Crystallization Front Dynamics	H.J. Zeiger J.C.C. Fan R.P. Gale R.L. Chapman	In <i>Laser and Electron Beam Processing of Materials</i> , C.W. White and P.S. Peercy, Eds. (Academic Press, New York, 1980), p. 234
5158	Formant Representation of Parameters for a Channel Vocoder	B. Gold	Proc. IEEE Intl. Conf. on Acoustics, Speech and Signal Processing, Denver, Colorado, 9-11 April 1980, Vol. 1, pp. 128-130, DTIC AD-A091873/0
5159	An Iterative Implementation for 2-D Digital Filters	D.E. Dudgeon	Proc. IEEE Intl. Conf. on Acoustics, Speech and Signal Processing, Denver, Colorado, 9-11 April 1980, Vol. 1, pp. 741-744, DTIC AD-A091868/0
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5169	Redistribution of Implanted Zn in InP After Q-Switched Laser Annealing and the Related Specific Contact Resistance	Z.L. Liau N.L. DeMeo J.P. Donnelly J.C. Norberg C.G. Hopkins C.A. Evans, Jr. J.P. Lorenzo	In <i>Laser and Electron Beam Processing of Materials</i> , C.W. White and P.S. Peercy, Eds. (Academic Press, New York, 1980), p. 500
5170	The Critical Band Coder — Digital Encoding of Speech Signals Based on the Perceptual Requirements of the Auditory System	M.A. Krasner	Proc. IEEE Intl. Conf. on Acoustics, Speech and Signal Processing, Denver, Colorado, 9-11 April 1980, Vol. 1, pp. 327-331, DTIC AD-A091869/8
5173	Techniques for Improving the Robustness of an Adaptive Predictive Coder in the Presence of Channel Errors	E. Singer	Proc. IEEE Intl. Conf. on Acoustics, Speech and Signal Processing, Denver, Colorado, 9-11 April 1980, Vol. 1, pp. 530-534, DTIC AD-A091870/6
5175	A Fast Algorithm for Spatial Interference Rejection	V.W.S. Chan	ICC '80 Conference Record, Seattle, Washington, 16-18 June 1980, pp. 59.4.1-59.4.7, DTIC AD-A098015/1
5179	Phase-Only Signal Reconstruction	M.H. Hayes J.S. Lim A.V. Oppenheim	Proc. IEEE Intl. Conf. on Acoustics, Speech and Signal Processing, Denver, Colorado, 9-11 April 1980, Vol. 1, pp. 437-440, DTIC AD-A091871/4

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5179A	Iterative Procedures for Signal Reconstruction from Phase	A.V. Oppenheim M.H. Hayes J.S. Lim	Proc. SPIE Vol. 231: 1980 <i>International Optical Computing Conference (Book 1)</i> , W.T. Rhodes, Ed. (Society of Photo-Optical Instrumentation Engineers, Bellingham, Washington, 1980), pp. 121-129
5180	A Split Band Adaptive Predictive Coding (SBAPC) Speech System	J.A. Feldman R.J. McAulay E. Singer	Proc. IEEE Intl. Conf. on Acoustics, Speech and Signal Processing, Denver, Colorado, 9-11 April 1980, Vol. 1, pp. 526-529, DTIC AD-A091872/2
5183	Advances in Transition-Metal-Doped Solid-State Lasers	P.F. Moulton A. Mooradian	Conf. on Laser and Electro-optical Systems, OSA/IEEE, San Diego, California, 26-28 February 1980, Digest of Technical Papers, p. 102
5186	Remote Sensing of NO Using a Differential Absorption LIDAR	N. Menyuk D.K. Killinger W.E. DeFeo	Conf. on Laser and Electro-optical Systems, OSA/IEEE, San Diego, California, 26-28 February 1980, Digest of Technical Papers, p. 94
5196	Electrode Band Structure and Interface States in Photoelectrochemical Cells	J.G. Mavroides J.C.C. Fan H.J. Zeiger	In <i>ACS Symposium Series</i> , No. 146, "Photoeffects at Semiconductor-Electrolyte Interfaces," A.J. Nozik, Ed. (American Chemical Society, New York, 1981), pp. 217-230, DTIC AD-A102933/9
5199	Adaptive Nulling with Satellite Antennas	J.T. Mayhan	ICC '80 Conference Record, Seattle, Washington, 16-18 June 1980, pp. 59.1.1-59.1.8, DTIC AD-A097996/3

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5229	Evaluation of the MTD in a High-Clutter Environment	J.R. Anderson D. Karp	The Record of the IEEE 1980 International Radar Conference, Arlington, Virginia, 28-30 April 1980, pp. 219-224
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5248	Acoustoelectronic Microcircuits: A New Technology for Signal Processing	R.W. Ralston	<i>1980 IEEE International Symposium on Circuits and Systems Proceedings</i> (IEEE, New York, 1980), pp. 1-9
5263	Image Restoration by Short Space Spectral Subtraction	J.S. Lim	Proc. IEEE Intl. Conf. on Acoustics, Speech and Signal Processing, Denver, Colorado, 9-11 April 1980, Vol. 1, pp. 444-448. DTIC AD-A092298/9

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5291	Broadband Modulation of CO ₂ Lasers Using Bulk Electro-Optic Crystals	G.M. Carter	Proc. SPIE Vol. 227: <i>CO₂ Laser Devices and Applications</i> (Society of Photo-Optical Instrumentation Engineers, Bellingham, Washington, 1980), pp. 138-140
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5406	Digital Filters for Infrared Target Acquisition Sensors	J.J. Otazo E.W. Tung R.R. Parenti	Proc. SPIE Vol. 238: <i>Image Processing for Missile Guidance</i> (Society of Photo-Optical Instrumentation Engineers, Bellingham, Washington, 1980), pp. 78-90, DTIC AD-A107061/4
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5448	Hybrid Convolver/Binary Signal Processor Achieves High Processing Gain	R.P. Baker J.H. Cafarella	<i>1980 Ultrasonics Symposium Proceedings</i> (IEEE, New York, 1980), pp. 5-9, DTIC AD-A102976/8

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5458	Signal Processing with Acousto-electric Surface Acoustic Wave (SAW) Devices	I. Yao	Proc. SPIE Vol. 239: <i>Guided-Wave Optical and Surface Acoustic Wave Devices, Systems and Applications</i> (Society of Photo-Optical Instrumentation Engineers, Bellingham, Washington, 1980), pp. 236-244, DTIC AD-A102936/2
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5473	Properties of Thin Oxynitride Gate Dielectrics Produced by Thermal Nitridation of Silicon Dioxide	M.L. Naiman F.L. Terry J.A. Burns J.I. Raffel R. Aucoin	Proc. IEEE Int'l. Electron Devices Mtg., Washington, DC, 8-10 December 1980, pp. 562-564, DTIC AD-A102649 1
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5475	Burst-Mode Atmospheric Optical Communication	J.H. Shapiro R.C. Harney	Proc. Natl. Telecommunications Conf., Houston, Texas, 30 November - 4 December 1980, Vol. 1, pp. 27.5.1-27.5.7, DTIC AD-A100998 4
5476	Identification and Spectral Estimation of Noisy Multivariate Autoregressive Processes	T.S. Lee	Proc. IEEE Int'l. Conf. on Acoustics, Speech and Signal Processing, Atlanta, Georgia, 30 March - 1 April 1981, pp. 503-507, DTIC AD-A102974 3
5479	State-of-the-Art in Coherent Near-mm Detectors	P.E. Tannenwald	Proc. SPIE Vol. 259: <i>Millimeter Optics</i> (Society of Photo-Optical Instrumentation Engineers, Bellingham, Washington, 1980), pp. 2-4, DTIC AD-A102968 5

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5493	Status of CO ₂ Isotope Laser Technology	C. Freed	Proc. Intl. Conf. on Lasers '80, New Orleans, Louisiana, 15-19 December 1980, pp. 615-622, DTIC AD-A109262/6
5495	A Low-Rate Vocoder Based on an Adaptive Subband Formant Analysis	R.J. McAulay	Proc. IEEE Intl. Conf. on Acoustics, Speech and Signal Processing, Atlanta, Georgia, 30 March - 1 April 1981, Vol. 1, pp. 28-31, DTIC AD-A102940/4
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5497	The Effects of Microphones and Facemasks on LPC Vocoder Performance	E. Singer	Proc. IEEE Intl. Conf. on Acoustics, Speech and Signal Processing, Atlanta, Georgia, 30 March - 1 April 1981, Vol. 1, pp. 1066-1069, DTIC AD-A103003/0

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